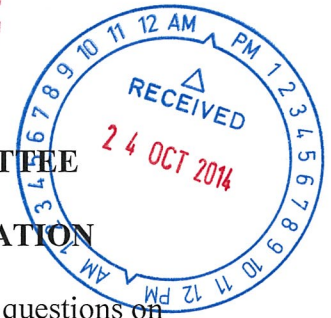


**PUBLIC**

30/10/14



**ESTIMATES AND FINANCIAL OPERATIONS COMMITTEE**  
**QUESTIONS ON NOTICE SUPPLEMENTARY INFORMATION**

Ministerial officers should follow the format shown below when supplying questions on notice related supplementary information.

**Wednesday, 16 June 2010**

**Swan River Trust**

*Hon Stephen Dawson MLC asked*

- (1) *I refer to page 12 of the Annual Report and the "Major Proposals Considered" section, and ask –*
- a) *In reference to the Elizabeth Quay development, during the dredging works for this development, how frequently was the water quality of the Swan River measured?*

Answer:

Dredging for the Elizabeth Quay development was carried out in five areas within the Swan River. During the dredging works, water quality sampling was carried out on 18 separate occasions at seven different monitoring locations in the Swan River both at the dredge site and upstream and downstream of the dredging works. Dredging commenced on 29 January 2014 and took approximately 14 weeks (127 days) to complete. The frequency of monitoring varied during this time. Two additional monitoring sites in the Swan River were added, but were infrequently sampled.

The majority of the dredging work was carried out in the first five and a half weeks, of which there were 10 sampling events to monitor water quality. During the first 14 days of dredging works, five water quality samples events were collected from all monitoring locations. This is an average frequency of twice per week. The remaining dredging works were considered as minor trimming works which involved eight water quality sampling events, which is on average approximately once per week.

- b) *Could you please provide the results of these assessments, including levels of heavy metals, pesticides and asbestos?*

Answer:

Water quality was measured across a suite of analytes, including metals, nutrients, hydrocarbons, and pesticides. Asbestos was not monitored in the river. Monitoring results showed high levels of copper exceeding the assigned water quality trigger levels. Total iron exceeded the trigger level on three separate occasions. Nickel marginally exceeded the trigger level once. Chlorophyll exceeded the trigger level on three occasions. Aluminium, cadmium and chromium exceeded the trigger levels once. Pesticides and hydrocarbons were recorded at levels below the trigger levels.

*AJ*

Data loggers were installed at four locations in the river to monitor the potential impact of turbidity on the seagrasses by measuring light and shading.

Based on baseline data it was expected that concentrations of some metals in the riverine pore water would exceed Australian and New Zealand Environmental Conservation Council (ANZECC) trigger values. As it was anticipated that the level of analyte concentrations from the dredging program would be above the trigger levels, a mixing zone with three silt curtains was created in the river to effectively dilute contaminate concentrations and reduce the overall total load before entering the wider river.

The approved Dredging Management Plan contained a tiered management response with five levels of decision making stop points. A further elevated management response was to investigate the potential effects of copper exceedances to the river ecosystem and the extent of plumes impacting seagrasses and aquatic organisms. Current monitoring shows that although the concentrations were elevated the total metal loads were diluted. The plumes did not cause irreversible damage to the seagrasses and the concentration of analytes has since returned within acceptable levels.

The trigger levels are set according to the marine ecosystem and freshwater ecosystems guidelines, and by definition these targets are long term measures of river health. The changes to ecosystems may not be evident in the short term, and therefore, the Trust is continuing to monitor the activities at Elizabeth Quay in an ongoing capacity.

c) *Did the Swan River Trust express any concerns to any Minister or agency about the levels of heavy metals, pesticides or asbestos in the water as a result of the dredging?*

Answer:

No. The managing contractor carried out the dredging works in accordance with the Sampling and Analysis Plan (SAP) that was approved by the Trust.

d) *If yes to c), what were the concerns raised and to whom or which agency were they expressed?*

Answer: N/A

(2) *I refer to page 13 of the Annual Report and the "Planning Policy and Strategies" section, and ask –*

a) *What the proposed changes to the Contaminated Sites Act 2003 about which the Trust provided advice to the Department of Environment Regulation?*

AG

Answer:

The Trust provided comment to the Department of Environment Regulation about the proposed changes to the Contaminated Sites Act 2003 in two phases. Firstly through a consultation Paper in September 2012, then in February 2014 in response to a refined discussion paper. The Trust's comments were generally focussed on those issues on which the Department was specifically seeking public comment, including the duty to report sites, the site classification scheme, mandatory disclosure requirements and timeframes for investigation and remediation.

b) *What was the Trust's advice?*

Answer:

The Trust's advice recognised that decisions surrounding contaminated site matters required a high level of technical expertise and that this input should be maintained within any procedures that may change as a result of the Act being reviewed.

(3) *I refer to page 16 of the Annual Report and the "Incidents and Complaints Management Summary" and ask –*

a) *Where were the locations for sewage discharge and on what dates were these reported?*

Answer:

There were eight incidents of sewage discharge reported to the Trust. In two cases, no sewage was detected in the follow up investigation.

- 1) 05/07/2013 – Riverside Drive, Perth
- 2) 03/08/2013 – Mends Street, South Perth
- 3) 08/08/2013 – Forrest Road, Armadale
- 4) 17/09/2013 - Carden Drive, Cannington
- 5) 28/01/2014 – Great Eastern Highway, Belmont
- 6) 12/02/2014 - Mill Point Road, South Perth – No sewage detected
- 7) 07/05/2014 – Ashfield Parade, Ashfield – No sewage detected
- 8) 09/05/2014 – Highgate

b) *Some FOI documents from your department, and reported by WA Today, show that the fecal bacterial levels in the river rise after every rainfall. Could you please explain why this happens?*

Answer:

After a rainfall event, stormwater flowing through drains and tributaries leading to the river will contain faeces from domestic animals (dogs), farm animals (cows, sheep) and wild animals (birds). It may also contain human faeces from malfunctions in the sewerage system and septic tanks. Stormwater is one of the most common causes of water pollution and the Department of Health recommends that people avoid swimming near stormwater drains, particularly during or after rainfall events.

c) *Could you please provide details of how many times fecal coliform organism levels have exceeded recreational water guidelines in the past three financial years?*

Answer:

The Swan River Trust does not maintain this data. The Department of Health is responsible for public health and coordinates bacterial water quality monitoring of popular swimming beaches along the WA coastline and waterways such as the Swan and Canning rivers with local government authorities during the bathing season.

d) *Do these incidents all relate to sewage spill incidents?*

Answer:

No. Faecal coliforms come from a range of sources that include those that contribute to stormwater pollution after rainfall (see answer (b) above), but also other sources including sullage discharged from boats and septic tanks.

e) *How many sewage spill incidents have there been in the river in the past three financial years?*

Answer:

21 sewage spills were reported between 1 July 2011 through to 30 June 2014.

A handwritten signature in black ink, appearing to be the initials 'AJ' with a stylized flourish.

f) *At which locations and on which dates did these occur, what was the volume of sewage spilled and what was the government's response to these events?*

Answer:

1) 11/08/2011	Barrack Square, Perth	Qty unknown
2) 24/12/2011	Johannah Street, North Fremantle	Qty unknown
3) 12/02/2012	Daly Street, Belmont	Qty unknown
4) 22/05/2012	Benara Road, Beechboro	Approx 50,000 litres
5) 20/06/2012	Iveson Crescent, Bassendean	Approx 200,000 litres
6) 25/06/2012	Spring Street, Midland	Approx 500 litres
7) 15/07/2012	Hackett Drive, Crawley	Approx 104,000 litres
8) 12/10/2012	Great Northern Highway, Middle Swan	Qty unknown
9) 02/12/2012	Great Northern Highway, Midland	Approx 13,000 litres
10) 23/12/2012	Mends Street, South Perth	No sewage detected
11) 18/01/2013	North Road, Bassendean	Qty unknown
12) 04/04/2013	Watercorp Treatment Plant, Northam	Qty unknown
13) 28/05/2013	Albany Highway, Gosnells	Qty unknown
14) 05/07/2013	Riverside Drive, Perth	Between 1-2,000 litres
15) 03/08/2013	Mends Street, South Perth	Qty unknown
16) 08/08/2013	Forrest Road, Armadale	Qty unknown
17) 17/09/2013	Carden Drive, Cannington	Qty unknown
18) 28/01/2014	Great Eastern Highway, Belmont	Qty unknown
19) 12/02/2014	Mill Point Road, South Perth	No sewage detected
20) 07/05/2014	Ashfield Parade, Ashfield	No sewage detected
21) 09/05/2014	Highgate	Approx 10,000 litres

The Swan River Trust responds to notifications or complaints of possible sewage discharge in accordance with the Wastewater Overflow Response Procedures (Department of Health, 2013). When the Swan River Trust receives a notification or complaint of an alleged sewage discharge the response is as follows:

a) A determination is made as to whether or not the incident impacts on the Swan Canning Riverpark and the Wastewater Service Provider is notified if this has not already occurred. The Wastewater Service Provider must notify relevant regulatory organisations, undertake containment and clean-up operations, install health-signs and participate in potential investigations.

b) The notification is recorded in the Incident and Complaint Management System (ICMS) operated by the Swan River Trust.

c) If the incident impacts on the Swan Canning Riverpark, Swan River Trust inspectors will attend the scene and participate in incident control and assess any potential environmental risks.

d) The Trust works with other regulatory stakeholders as required under the Wastewater Overflow Response Procedures including Water Corporation, any Local Government Authorities, Department of Health and others to ensure that notifications, clean-ups and containments, and incident management and investigation is undertaken appropriately.

g) *What is the public health risk of members of the public coming into contact with fecal matter in the river?*

Answer:

Matters relating to public health risk and the river are the responsibility of the Department of Health.

h) *What can you do to fix this?*

Answer:

The Trust works closely with other regulatory organisations including the Department of Health, the Department of Transport and the Water Corporation to support measures that reduce these contaminants as well as incident response to spillages. In recent years the Trust is aware that considerable measures have been directed at the urban infill sewerage program, upgrades of sewerage conveyance and emergency storage systems and monitoring and response measures.

(4) *I refer to page 51 of the Annual Report, "Table 9: Percentage of developments audited in full compliance with approval conditions", and ask –*

(a) *Which developments were non-compliant with approval conditions and which conditions did they not comply with?*

Answer:

As reported in the Trust's Annual Report, the effectiveness of the Trust's development control process is measured as a percentage of developments found to be 100 per cent compliant with those approval conditions relevant at the time of audit. Of the 462 compliance actions conducted on developments approved under Part 5 of the *Swan and Canning Rivers Management Act 2006*, or by way of permit under the *Swan and Canning River Management Regulations 2007*, 154 were found to be non-compliant with one or more relevant approval conditions at the time of the compliance action.

The table below captures every project that was therefore 'non-compliant' at the time of audit. The majority of these projects quickly became 'compliant' due to this effort and were completed without further incident. The information below does not outline which particular conditions a project was non-compliant with at the time of audit as to report on each individual condition would be a lengthy process and potentially misleading. A project may have been assessed as non-compliant for a number of reasons. For example, a management plan was inadequate and required revision, prior to commencement of works requirements were not addressed before works began, water quality monitoring may have revealed (even minor) exceedances of guidelines, agreed management measures were not put in place quickly enough, inadvertent damage was caused to the river or vegetation, site conditions resulted in the works being slightly modified or the works extended outside of the expected timeframe. In considering the information provided below, it should be noted that the vast majority of the projects listed are now compliant. As noted above, the reasons for non-compliance are varied and therefore some of the projects below may have had little or no adverse impact on the river system despite being non-compliant for a period.

<b>2013/2014 Financial Year</b>	
<b>Project</b>	<b>Location</b>
<b>Part 5</b>	
Swan Yacht Club - Maintenance Dredging - 360 Environmental	Lot 10105 Riverside Road, East Fremantle Reserve 27377
Refurbishment of hard tennis courts - East Fremantle Lawn Tennis Club	Lot 15722 - Reserve 7800 - Preston Point Road, East Fremantle
Construction of Bayswater Jetty	Lot 50 Riverside Gardens East Boat Ramp, Bayswater
Redevelopment of existing site for New Operations Centre for the Dept of Fisheries	5 Ellam Street, Victoria Park
Point Walter Reserve - Foreshore Restoration	Point Walter (Reserve 4813) Lot 11241 Honour Avenue' Bicton
Replacement of pedestrian bridge	Centennial Pioneer Park - Lot 4 - 2130 Albany Highway, Gosnells
Construction of principal shared pathway	Lots 400 and 551 Wilkie Street and Riverside Drive, South Guildford
Alterations and additions to dwelling including part demolition to construct a new fence and garage	Lot 811 - 29 Meadow Street, Guildford
Landscaping and Stormwater Disposal Works in the Development Control Area - In Association with 15 Grouped Dwellings Proposal.	Lot 72 - 38 Astley Street, Gosnells
Club Refurbishments to Workshop and Hardstanding Royal Perth Yacht Club	Matilda Bay Reserve 17375 Hackett Drive, Crawley
Installation of new H jetty and upgrade of a west jetty	Lot 300 on plan 47450 adjacent to lot 14 Victoria Avenue, Claremont
Jetty upgrade, East Fremantle Yacht Club	Petra Street, Bicton
<b>Section 84</b>	
Section 84 Variation to SRT2827 - Replacement of Existing Jetty - Time extension variation to condition 1	Lot 506 Rivervale - Adjacent to Lot 801 - 62-62 Great Eastern Highway, Rivervale
Amendment to Regional Open Space Foreshore Management Plan	Variation to SRT2433-1 Waterhall, South Guildford
Foreshore Management Plan - Time Extension variation of Condition 1	Lots 824 and 832 - 127 and 159 Mills Road, West Martin
Change of use to restaurant and bar upstairs with extension to kitchen and deck above and addition of staircase to access deck	Lucky Shag Bar Barrack Square, Riverside Drive, Perth
<b>Permit</b>	

*AJ*

Ascot Racecourse Foreshore Stabilisation Location A-C	Lot 11149 on Plan 15685 Grandstand Road, Ascot
Relocation and Upgrade to Existing Irrigation Pump Station	2120 Albany Highway, Gosnells - Centennial Pioneer Park
Repairs, Maintenance and Erosion Control to River Wall	Nedlands Foreshore at 3 sites near Tawarri Jetty off The Esplanade, Dalkeith
Replacement of One Kilometre of Footpath	Lot 14555 on Plan 32409 Subiaco, Matilda Bay Reserve
Great Eastern Highway Upgrade - Epsom Avenue Drainage Outfall Upgrade	Lot 10030 Reserve 28420 Epsom Avenue, Ascot
Great Eastern Highway Upgrade - Acton Avenue Drainage Outfall Upgrade	Lot 505 Great Eastern Highway and Acton Avenue, Rivervale
Removal of Tree	Lot 8433 on Plan 173974 (Reserve 17375), Crawley
Mosman Jetty Maintenance, Johnson Parade Mosman Park	Lot 300 Reserve 48325 Johnson Parade, Mosman Park
Repairs to Existing Infrastructure and Jetties	Lot 300 (26) Riverside Road, East Fremantle - Perth Flying Squadron Yacht Club (Reserve 48325)
Replacement of two timber piles at B and C Jetties, four Steel piles at C and G Jetties and one timber pile at G Jetty	John St, North Fremantle
Refurbishment and modification to existing public toilets	Lot 301 on Plan 47451 Mends Street Jetty, South Perth - Reserve 48325 - Bellhouse Café
Repairs and Maintenance to Café	Lot 301 on Plan 47451 Mends Street Jetty, South Perth
Completion of Erosion Control - Placement of Renourishment Sand - Town of East Fremantle	Lot 14610 on Plan 33521 Riverside Road, East Fremantle - John Tonkin Park Reserve 31404
Additions to disabled toilets at the Boatshed Restaurant	James Mitchell Reserve (reserve 388), Lot 1203 (1L) Coode Street, South Perth
Restoration of Boat Shed (no. 42)	Lot 300 Keanes Point Reserve, Peppermint Grove
Installation of Signage	Lot 301 on Plan 47451 Mends Street Jetty, South Perth - Bellhouse Café
Installation of Bubble-up Piton Existing Stormwater Drainage Pipe	Lot 501 Garratt Road, Bayswater
Installation of temporary stormwater bubble-up pit	WA Police, Maylands
Emergency Repairs to Richmond Street Wastewater Pump Station - Water Corporation	Greenfield Street bridge, Cannington
Shelley Beach Stabilisation Works - City of Canning	Lot 1859 on Plan 208931 Riverton Drive, North Shelley - Reserve 26292
Modification of 2 existing stormwater drains to drain swales	Riverton Drive, Shelley - Wadjup Point Reserve

AJ



Erosion Control - Limestone Revetment	Lot 521 - 25 Third Avenue, Woodbridge - Reserve 24092. Governor Stirling Senior High School.
Demolition and construction of new Deepwater Point jetty	Reserve 11686, Deepwater Point, Mount Pleasant
Demolition and construction of Tranby jetty	Lot 302 Reserve 48325 Johnson Road, Maylands
Installation of New Drainage System	Road Reserve at Southern End of Sulman Avenue, Salter Point
Construction and redevelopment of Playground	Fern Cove Reserve, Wilson
Repairs to Riverwall - City of Perth	Lot 503 Mounts Bay Road, Perth - Reserve 36167
Realignment of existing shared path	Lot 9595 and Lot 301 Burke Drive, Attadale
Resurfacing Principal Share Pathway	Kwinana Freeway, South Perth, between Como and Thelma Street
Widening and improvements Principal Share Pathway	Kwinana Freeway, South Perth, between Como and Thelma Street
Installation of access gate realignment of shared path and hardstand	Lots 1007 & 1070 Melville Parade, South Perth Milyu nature reserve
Maintenance to Jetties	Mosman Park, Applecross, and South Perth Lots 672, 7840, 11835
Construction of a small store room	Lot 5107 - 24 Baron Way, Gosnells
Widening of existing asphalt footpath	Foreshore area The Esplanade between Locock Street and Waterview Parade, Ascot
Drainage footpath and road improvement works	Melville Beach Road from Nairn Road to Cunningham Road, Applecross
Replacement of two shade shelter works - and concrete slabs, new seating, footpath and beach shower, associated site works and retaining wall	Harvey Beach - Lot 447 Rule Street, North Fremantle (Reserve 7077)
Repairs to existing infrastructure and jetties	Perth Flying Squadron Yacht Club, Reserve 48325, The Esplanade, Dalkeith
Erosion control works	Lot 7840 on plan 216387 The Strand Applecross, Jeff Joseph Reserve
Drainage, Footpath and Road Improvement Works - Stage 1	Melville Beach Road from Dee Road to 50 Metres South of Nairn Road, Applecross
Drainage, Footpath and road improvement works - Stage 2	Melville Beach Road from Nairn Rd to Cunningham Road, Applecross
Installation of steps	Lot 12700 on Plan 17676 (Point Dundas Reserve 34188) Majestic Close, Applecross

Emergency Erosion Control Works	Lot 12700 on Plan 17676 (Point Dundas Reserve 34188) Majestic Close, Applecross
Limestone rock protection barrier	Applecross Lot 12700 Majestic Close, Applecross, Dundas Point Reserve
Licence	
Elemental Surf	Swan River from Point Walter to John Tonkin Reserve, Melville
Vidler Surf, Cottesloe	Swan River - 6 x locations, Crawley, Freshwater Bay
Kite Surf warehouse	Swan River offshore from Attadale Foreshore; Melville Beach Road, Applecross; and Point Walter, Bicton
Soulkite	Swan River - Adjacent to Point Walter Sandbar, Bicton
Soulkite	Swan River - Melville Beach Road, Applecross
Elemental surf	Point Walter, Bicton

AG